Combat Identification for the Dismounted Soldier (CIDDS)

Stand Alone CIDDS

CIDDS Weapon Subsystem (1.1 lb.)

- 1.55 Micron CIDDS Laser
- .904 Micron Integrated MILES Laser
- .840 Micron Integrated IR Aiming Pointer

CIDDS Helmet Subsystem (.90 lb.)

- CIDDS and MILES Integrated Detectors
- L-Band Radio for LW Compatability
- Multiple Conformal Antennas for Reliable RF Response

Land Warrior CIDDS

Laser Detectors

- Leverage LW Laser Detectors to Detect CIDDS Interrogation and MILES Hits

Multifunctional Laser Transmitter

- CIDDS Interrogator
- Near IR Aiming Pointer
- MILES Interoperable

Computer/Radio Subsystem

- Leverages:
  - LW Computer to Process CIDDS/ MILES Msgs
  - Soldier Radio to XMIT/Rec Friendly Response
  - Power Supply

MISSION
Provide the materiel solution for minimizing battlefield fratricide incidents among dismounted soldiers.

DESCRIPTION AND SPECIFICATIONS
Combat Identification for the Dismounted Soldier (CIDDS) is a lightweight, laser-interrogate, radio-frequency-reply, question-and-answer combat identification system. Two configurations of CIDDS are being developed: Stand-alone and Land Warrior.

The Stand-alone CIDDS includes a weapon-mounted interrogator and a helmet-mounted transponder, each weighing approximately one pound. The weapon-mounted interrogator integrates an eyesafe combat ID laser; a near-infrared laser pointer for aiming the soldier's weapon at night with night vision goggles; and a Multiple Integrated Laser Engagement System (MILES) laser for an embedded training capability that is interoperable with MILES/MILES 2000. The helmet-mounted transponder consists of CIDDS- and MILES-integrated laser detectors, an electronic processor unit, and omni-directional conformal antennas.

The CIDDS Land Warrior configuration uses the weapon-mounted interrogator developed for the Stand-alone CIDDS. It leverages the Land Warrior laser detectors to detect CIDDS interrogations and MILES hits, the Land Warrior computer to process CIDDS/MILES messages, and the Land Warrior soldier radio to transmit friendly responses.

CIDDS' operating range is a minimum of 1.1 kilometers under clear weather conditions, and exceeds the soldier's target acquisition capability under degraded atmospheric conditions.

CIDDS, a horizontal technology integration program, fulfills requirements stated in the Operational Requirements Document for use by Army, Marine and Special Operations forces. The acquisition objective is approximately 102,000 systems, including 68,000 Stand-alone and 34,000 Land Warrior versions.

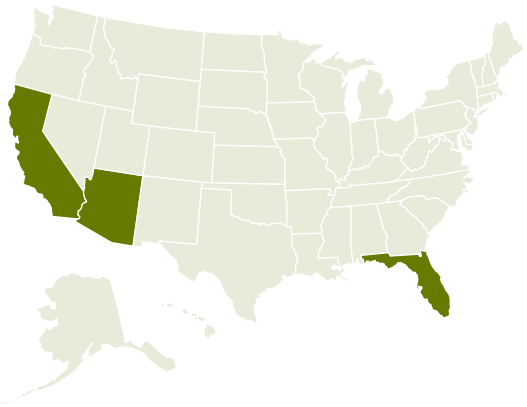
FOREIGN COUNTERPART
No known foreign counterpart

FOREIGN MILITARY SALES
None

PROGRAM STATUS
4QFY97 Awarded competitive contract for engineering and manufacturing development (EMD) effort.
FY99 Continued CIDDS EMD efforts, including the following accomplishments:
- Completed hardware and software design
- Completed weapon integration kit design
- Completed fabrication and testing of five prototypes for user evaluation
- Began redesign of helmet electronics and weight reduction effort
- Began fabrication of laser interrogator

PROJECTED ACTIVITIES
FY00 Complete re-design of helmet electronics and weight reduction effort; complete fabrication, assembly, and testing of 148 EMD hardware systems to support technical and operational testing.
1QFY01 Conduct initial operational test and evaluation.
2QFY01 Begin low-rate initial production.
3QFY01 First unit equipped.
1QFY02 Milestone III decision scheduled.

PRIME CONTRACTORS
Motorola (Scottsdale, AZ)



* See appendix for list of subcontractors